IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 6. (Canceled)

7. (Currently Amended) A method for reducing noise associated with an audio signal received through a microphone sensor array of a game controller during game play, comprising:

detecting a target signal component and a noise signal component from at least two microphones integrated with the game controller;

enhancing the target signal component of the audio signal <u>by executing a beam-forming operation performed</u> through a first filter;

blocking the target signal component <u>by executing a reverse beam-forming operation</u> through a second filter;

<u>aligning an output of the second filter through an adaptive filter;</u>

combining an output of the first filter and an output of the ~~second~~ <u>adaptive</u> filter so that noise signal component is reduced without distorting the target signal;

~~periodically~~ monitoring an acoustic set-up associated with the audio signal <u>as a background process using the beam-forming operation of the first filter and the reverse beam-forming operation of the second filter to track the target signal component</u>; and

~~calibrating~~ <u>periodically setting a calibration of</u> both a value of the first filter and a value of the second filter based upon the <u>monitored</u> acoustic set-up ~~so as~~ to actively ~~update tracking and steering~~ <u>steer the first filter and the second filter</u> toward the target signal component during game play.

8. (Original) The method of claim 7, further comprising:

defining the target signal component and a noise signal component through second order statistics.

9.   (Original) The method of claim 8, further comprising:

separating the target signal component and the noise signal component; and

determining a time delay associated with each microphone sensor of the microphone senor array.

10.   (Canceled)

11.   (Original) The method of claim 7, wherein the acoustic set-up refers to relative position of a user and the microphone sensor array.

12.   (Currently Amended) The method of claim 7, wherein the method operation of periodically ~~monitoring an acoustic set-up associated with the audio signal~~ calibrating occurs about every 100 milliseconds.

13.   (Currently Amended) The method of claim 7, wherein the ~~method operation of calibrating both a value of the first filter and a value of the second filter based upon the acoustic set-up includes~~ [[,]]

~~applying~~ [[a]] reverse beam-forming implements blind source separation ~~scheme~~ using second order statistics associated with the audio signal to track and steer toward the target signal component.

14. - 24. (Canceled)

25.   (Currently Amended) A system capable of isolating a target audio signal from multiple noise sources during active use, comprising:

a portable consumer device configured to move in positions that are independent from positions of a user during active use;

a computing device, the computing device including logic configured to enhance the target audio signal without constraining movement of the portable consumer device, the logic for enhancing the target audio signal using a beam-forming operation executed through a first filter, logic for blocking the target audio signal using a reverse beam-forming operation executed through a second filter, logic for aligning an output of the second filter through an adaptive filter, logic for monitoring an acoustic set-up as a background process using the beam-forming operation of the first filter and the reverse beam-forming operation of the second filter to track a position of the target audio signal, and logic for periodically setting a calibration of both the first filter and the second filter based upon the monitored acoustic set-up to actively steer the first and the second filter toward the position of the target audio signal during game play; and

a microphone array affixed to the portable consumer device, the microphone array configured to capture audio signals, wherein a listening direction associated with the microphone array is actively adjusted during active use through the logic configured to enhance the target audio signal.

26.   (Previously presented) The system of claim 25, wherein the computing device is in communication within the portable consumer device.

27.   (Currently Amended) The system of claim 26, wherein the computing device includes,

~~the logic for enhancing the target signal that is executed by a first filter;~~

~~logic for blocking the target signal through a second filter;~~

logic for combining the output of the first filter and the output of the second filter in a manner to reduce noise without distorting the target signal[[;]].

~~logic for periodically monitoring an acoustic set-up associated with the audio signal;~~
~~and~~

~~logic for calibrating both the first filter and the second filter based upon the acoustic setup during active use of the system.~~

28.   (Original) The system of claim 25, wherein the microphone array is configured in one of a convex geometry and a straight line geometry.

29.   (Original) The system of claim 25, wherein a distance between microphones of the microphone array is about 2.5 centimeters.

30.   (Original) The system of claim 25, wherein the portable consumer device is a video game controller and the computing device is a video game console.

31.   (Currently Amended) A system for enhancing a target audio signal, comprising:

a microphone array affixed to a video game controller, the microphone array configured to detect an audio signal that includes the target audio signal and noise;

a computing system including circuitry configured to process the audio signal when received by the microphone array of the game controller, the computing system including filtering and enhancing logic ~~that is periodically monitored and actively calibrated~~ to filter the noise using a reverse beam-forming operation and enhance the target audio signal using a beam-forming operation, monitoring logic using the beam-forming operation and the reverse beam-forming operation as a background process to monitor ~~as~~ a change in position of the video game controller ~~and~~ relative to a position of a source of the target audio signal ~~change in position~~ during game play, wherein the filtering of the noise and enhancing the target audio signal includes ~~processing a plurality of filter-and-sum operations at the computing device~~ periodically setting a calibration to actively steer the filtering and enhancing logic toward the position of the source of the target audio signal.

32.   (Original) The video game controller of claim 31, wherein the filtering and enhancing logic includes,

separation filter logic configured to separate the target audio signal from the noise through a blind source separation scheme.

33.   (Original) The video game controller of claim 32, wherein the blind source separation scheme is associated with a second order statistic derived from data corresponding to the audio signal.

34.   (Previously presented) The video game controller of claim 32, wherein the separation filter logic includes,

adaptive array calibration logic to perform the periodic monitoring and calibration, the adaptive array calibration logic configured to calculate a separation filter value, the separation filter value capable of adjusting a listening direction associated with the microphone array.

35.- 39. (Canceled)